



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,463	08/16/2006	Victor De Leeuw	NOR-1263	7474
37172	7590	07/15/2008		
WOOD, HERRON & EVANS, LLP (NORDSON)			EXAMINER	
2700 CAREW TOWER			HEPPERLE, STEPHEN M	
441 VINE STREET				
CINCINNATI, OH 45202			ART UNIT	PAPER NUMBER
			3753	
NOTIFICATION DATE	DELIVERY MODE			
07/15/2008	ELECTRONIC			

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

krooney@whepatent.com  
mhines@whepatent.com  
usptodock@whepatent.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,463	<b>Applicant(s)</b> DE LEEUW, VICTOR
	<b>Examiner</b> Stephen M. Hepperle	<b>Art Unit</b> 3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 16 August 2006.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 8-27 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 19-26 is/are allowed.

6) Claim(s) 8-18 and 27 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 12 January 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 1/12/06

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

Claims 1-7 have been cancelled.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-12, 14-15, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Patterson (5,2234,026). Patterson shows a pressure regulator with a piston 18 sealing against piston 15, and connected to a valve and stem 33. The valve is biased closed by spring 34. A second partial volume includes cylindrical chamber 52, intermediate portion 58, and outlet portion 40, 53. The bottom of the valve is exposed to outlet pressure. (claim 9). Regarding claim 15, note cover 14, which has an opening at the top. Regarding claim 10, the o-ring 25 is seen as the recited guide. The method of claim 27 is seen as performed by Patterson.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-11 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Patterson in view of Semon (3,643,683). Semon shows a similar valve, with a separate valve guide 20 holding a biased closed valve 13. The guide and valve are exposed to outlet pressure. It would have been obvious to form a separate guide for the bottom of the Patterson

valve as an alternative construction and to permit replacement of a worn guide without replacing the entire housing.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patterson in view of Ono (5,159,952). Ono teaches the use of a ceramic valve seat in a pressure regulator. It would have been obvious to provide Patterson with a ceramic seat as taught by Ono for wear and corrosion resistance.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patterson. It would have been obvious to place a dust cover over the hole in the cover 14 to prevent inadvertent entry of dirt or liquids.

Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patterson in view of Armstrong (2,105,681). Armstrong shows a pointer 26 on a piston stem extending above a valve housing. It would have been obvious in view of Armstrong to extend a rod above the Patterson piston through the opening at the top of the cover 14 and attach a screw as a pointer to indicate the piston position. The use of an ordinary screw would avoid making a special pointer.

Claims 19-26 are allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Petley shows a pressure regulator where the diaphragm-piston has a rod 35 extending upwardly through a cover, providing an inherent position indicator. Cabell shows another indicator c for a regulator. Mueller et al. shows a piston operated regulator with a second partial volume as claimed, including exposing the bottom of the valve to outlet pressure. Garafolo teaches a ceramic valve seat (claim 4) in a pressure regulator. Griswold shows a fluid operated valve with a separate upper chamber admitting other pressure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Hepperle whose telephone number is 571-272-4913. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen M. Hepperle/  
Primary Examiner, Art Unit 3753